

Synthesis of compounds 206 and 207

A mixture of KO^tBu (0.136, 1.15 mmol) and (4-chlorobenzyl)triphenylphosphonium chloride (0.496 g, 1.15 mmol) in THF (10 mL) was stirred at ambient temperature for 1 hour, then a solution of compound 205 (0.20 g, 0.38 mmol) in THF (5 mL) was added. The reaction mixture was stirred at ambient temperature overnight, then quenched with saturated NH₄Cl solution (1 mL), diluted with EtOAc (150 mL), washed with brine (2 x 25 mL), dried over anhydrous MgSO₄ and concentrated. The residue was purified by chromatography on silica gel (hexanes/EtOAc) to give compound 206 (0.093, 39%) as a colourless glass and compound 207 (0.126 g, 53%) as a colourless glass.

Synthesis of compound 208

To a solution of compound 206 (0.15 mmol) in THF (10 mL) was added LiAlH₄ (0.59 mL of a 1 M solution in THF, 0.59 mmol). The mixture was stirred at ambient temperature overnight, then quenched with Na₂SO₄·10H₂O and stirred for 30 minutes. The mixture was filtered, rinsing with EtOAc, and concentrated to dryness to give crude compound 208 (0.089 g, colourless glass) that was used in the next reaction without further purification.

Synthesis of compound 209

Crude compound 208 (0.15 mmol) was dissolved in 80% acetic acid (10 mL) with THF (1 mL) and MeOH (1 mL) and stirred at 40°C for 4.5 hours, then at ambient temperature overnight. The mixture was concentrated to give crude compound 209 (0.074 g) as a colourless glass that was used in the next reaction without further purification.

Synthesis of compound 210

A mixture of KO^tBu (0.122, 1.03 mmol) and MePPh₃Br (0.368 g, 1.03 mmol) in THF (5 mL) was stirred at ambient temperature for 1 hour, then a solution of compound 209 (0.074 g, 0.17 mmol) in THF (5 mL) was added. The reaction mixture was stirred at ambient temperature overnight, then quenched with saturated NH₄Cl solution (1 mL), diluted with EtOAc (100 mL), washed with brine (2 x 20 mL), dried over